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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/16/2001

Kenneth Rose

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EXAMINER

TANG, KAREN C

ART UNIT

PAPER NUMBER

2151

MAIL DATE

DELIVERY MODE

01/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/978,475

Applicant(s)

ROSE ET AL.

Examiner

Karen C. Tang

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-16, 24-27 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16, 24-27 and 30-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/16/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/20/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/20/07 has been entered.
- Claims 1-8, 10-16, 24-27, 30-38 are presented for further examination.

Response to Arguments

Applicant's arguments with respect to claims 1-8, 10-16, 24-27, 30-38 have been considered but are moot in view of the new ground(s) of rejection.

REQUIREMENT FOR INFORMATION

Applicant and assignee of this application are required under 37 C.F.R. 1.105 to provide the following information that the examiner has determined necessary to the examination of this application: The Applicants are requested to submit the information stated in the "Background of the invention" of applicant's own specification as well as information related to Fig 1a and 1b.

Applicant submitted that on page 4 of its own "Background of the Invention" in the specification, indicating the method information submitted should not be considered as prior art, however, since applicant does not admit the background of the invention portion of the

specification as a prior art, examiner is requesting applicant to submit information that is being disclosed in "background of the invention".

Applicant should understand that in the "Background of the Invention" section of the specification, should comprises two parts:

(1) Field of the Invention: A statement of the field of art to which the invention pertains.

This statement may include a paraphrasing of the applicable U.S. patent classification definitions. The statement should be directed to the subject matter of the claimed invention.

(2) Description of the related art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A paragraph(s) describing to the extent practical the state of the prior art or other information disclosed known to the applicant, including references to specific prior art or other information where appropriate. Where applicable, the problems involved in the prior art or other information disclosed which are solved by the applicant's invention should be indicated. See also MPEP § 608.01(a), § 608.01(p) and § 707.05(b).

Therefore, back providing information in the background information, it is clearly demonstrating the applicant known the existence of the prior art or other information such as references to specific prior art or other information where appropriate. Therefore, by assisting the examining process, applicant needs to explain why the background of the invention could not be considered as the prior art, and applicant need to further submit all the known information related to the instant application.

Drawings

11/2/18 ✓
Figure 1a and 1b should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. Applicant has indicated on page 9, Lines 8 of the specification, that all the method has described above are prior art. Therefore, applicant is requested to label figures with a legend such as "Prior Art".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10-16, 24-27, 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorti et al hereinafter Gorti (US 20030007452) in view of Kalkunte et al hereinafter Kalkunte (US 6,118,761).

1. Referring to Claims 1, 2, 11, 25, and 38, Gorti disclosed a transmitting device transmitting data at a first non-zero rate to a memory for storage (Queue, refer to 0027, lines 12) therein

during a first period of time (traffic, data traffic flow in different time at different rate, refer to 0035, Lines 1-5 and 0027, Lines 16-19 and 0011);

the transmitting device transmitting data at a second non-zero rate to the memory for storage therein during a second period of time (flow rate after increasing, refer to 0033);

wherein the second period of time is subsequent to the first period of time and (the first period of time is before adjusting the rate, and the second period of time is after adjusting flow rate).

transmitting device transmitting data at a third non-zero rate to the memory for storage therein during a third period of time (the delta t, refer to 0039, the system can transmit data periodically at non-zero rate to the queue/pipe);

storage therein during a third period of time (delta t, refer to 0039);

Gorti disclosed wherein the third period of time is subsequent to the first period of time (since the rate of increase is linear, the first rate is going to be less than second rate and the second rate will be less than the third rate),

Although Gorti disclosed the invention substantially as claimed, Gorti is silent regarding the memory is FIFO buffer

Kalkunte, in an analogous art disclosed "the memory is FIFO buffer" (refer to Col 1, Lines 40-55)

Hence, providing functions disclosed by Kalkunte, would be desirable for a user to implement in order to reduce all the network congestion.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Gorti by including the features presented by Kalkunte.

2. Referring to Claims 3, 12 and 26, Gorti disclosed wherein the transmitting device is contained in a switching fabric (24, refer to Fig 1), wherein the memory is contained in a line card coupled (7, 8, and 9, refer to Fig 1) to the switching fabric via a data link (links that connect the line card and the switch), and wherein the transmitter transmits data via the data link to the memory for storage therein (refer to 0007).

3. Referring to Claims 4, 10 and 24, Gorti disclosed a transmit signal (must have a signal in order to control the rate flows); and
transmitting the rate control signal to the transmitting device to instruct the transmitting device to stop transmitting data at the first non-zero rate and start transmitting data at the second non-zero rate (refer to 0034-0035);
wherein the transmitting device stops transmitting data to the memory device at the first data rate and starts transmitting data to the memory device at the second data rate in response to the transmitting device receiving the rate control signal (refer to 0034-0035).

4. Referring to Claims 5, 13 and 27, Although Gorti disclosed the invention substantially as claimed, Gorti is silent regarding generating first data quantity value representing a quantity of data stored in the memory device at a first point in time; comparing the first data quality value to a first predetermined value;
wherein the rate control signal is generated in response to comparing the first data quantity value to the first predetermined value;

Kalkunte, in an analogous art disclosed generating first data quantity value representing a quantity of data stored in the memory device at a first point in time; comparing the first data quantity value to a first predetermined value (refer to Col 6, Lines 15-55); wherein the rate control signal is generated in response to comparing the first data quantity value to the first predetermined value (refer to Col 6, Lines 55-67).

Hence, providing functions disclosed by Kalkunte, would be desirable for a user to implement in order to reduce all the network congestion.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Gorti by including the features presented by Kalkunte.

5. Referring to Claim 6, Gorti disclosed the invention substantially as claimed, Gorti is silent regarding comparing the first data quantity value to a plurality of determined values, wherein the first predetermined value is one of the plurality of first predetermined values; wherein the rate control signal is generated in response to comparing the first quantity value to the plurality of predetermined values;

Kalkunte, in an analogous art disclosed comparing the first data quantity value to a plurality of determined values, wherein the first predetermined value is one of the plurality of first predetermined values (refer to Col 5, Lines 25-55);

wherein the rate control signal is generated in response to comparing the first quantity value to the plurality of predetermined values (refer to Col 8, Lines 15-60).

Hence, providing functions disclosed by Kalkunte, would be desirable for a user to implement in order to reduce all the network congestion.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Gorti by including the features presented by Kalkunte.

6. Referring to Claims 7 and 15, Gorti disclosed the invention substantially as claimed, Gorti is silent regarding generating a second data quantity value representing a quality of data stored in the memory device at a second point in time, wherein the second point in time is prior to the first point in time;

compare first data quantity value to the second data quantity value (refer to Col 7, Lines 1-10); wherein rate control signal is generated if the first data quantity value is not equal to the second data quantity value.

Kalkunte, in an analogous art disclosed generating a second data quantity value representing a quality of data stored in the memory device at a second point in time, wherein the second point in time is prior to the first point in time (refer to Col 8, Lines 15-40);

compare first data quantity value to the second data quantity value (refer to Col 7, Lines 1-10); wherein rate control signal is generated if the first data quantity value is not equal to the second data quantity value (refer to Col 9, Lines 25-45). Hence, providing functions disclosed by Kalkunte, would be desirable for a user to implement in order to reduce all the network congestion.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Gorti by including the features presented by Kalkunte.

7. Referring to Claim 8, Gorti disclosed the invention substantially as claimed, Gorti is silent regarding generating total data input count at the first point in time, wherein the total data input count represents a quantity of data input to the memory during a period of time ending in the first point in time;

generating total data output count at the first point in time, wherein the total data output count represents a quantity of data output from the memory device during the period of time ending in the first point in time;

subtracting the total data output count from total data input count.

Kalkunte, in an analogous art disclosed generating total data input count at the first point in time, wherein the total data input count represents a quantity of data input to the memory during a period of time ending in the first point in time (refer to Col 5 Lines 40-55);

generating total data output count at the first point in time, wherein the total data output count represents a quantity of data output from the memory device during the period of time ending in the first point in time (refer to Col 5, 40-55);

subtracting the total data output count from total data input count (Col 5, Lines 40-67). Hence, providing functions disclosed by Kalkunte, would be desirable for a user to implement in order to reduce all the network congestion.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Gorti by including the features presented by Kalkunte.

9. Referring to Claim 14, Gorti disclosed the invention substantially as claimed, Gorti is silent regarding a plurality of comparing circuits, each one of which is configured to compare the first

data quantity value to a respective one of a plurality of predetermined values; wherein the first comparing circuit is one of the plurality of comparing circuits, and wherein the first predetermined value is one of the plurality of first predetermined values;

Kalkunte, in an analogous art disclosed a plurality of comparing circuits, each one of which is configured to compare the first data quantity value to a respective one of a plurality of predetermined values (refer to Col 6, Lines 25-67), wherein the first comparing circuit is one of the plurality of comparing circuits (refer to Col 7, Lines 1-10), and wherein the first predetermined value is one of the plurality of first predetermined values (refer to Col 6, Lines 15-67); Hence, providing functions disclosed by Kalkunte, would be desirable for a user to implement in order to reduce all the network congestion.

Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Gorti by including the features presented by Kalkunte.

10. Referring to Claim 16, Gorti disclosed wherein the first and second circuits are the same circuits (refer to 0082 and 0083).

11. Referring to Claims 30-37, are rejected as the same reason as of Claims 1- 16, 24-27.

Conclusion

Examiner's Notes: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

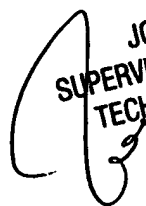
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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Karen Tang

 JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100